

REMARKS

Initially, the undersigned attorney acknowledges the Examiner comments that, due to the Examiner's workload, time constraints and a lengthy absence from the office the Examiner was unable to schedule an interview prior to the deadline for action for the instant application. Contrary to the Examiner's remarks, the undersigned attorney believes an interview on the merits of this application would have been very beneficial and would have expedited prosecution of this application. In particular, the Examiner's remarks that an interview would probably not have expedited prosecution because of the grounds of rejection set forth are different than the grounds of rejection in the previous final Office Action is respectfully but strongly disputed. If there are new grounds of rejection, the Applicants would respectfully request the Examiner to indicate to them what those new grounds of rejection are. There are fewer grounds of rejection, but there appears to be the same grounds of rejection as previously provided in the former final Office Action.

In light of the fact that no interview was earlier granted to the Applicants in this case, Applicants respectfully request and continue to seek an interview with the Examiner in the event the Examiner continues to reject the claims as presented herein. Moreover, Applicants would request that any such interview be granted *before* the Examiner proceeds to provide another Office Action, especially if it is the intention of the Examiner to make any such Office Action final. Applicants would appreciate the Examiner's cooperation in this matter.

Turning to the Office Action presently in existence, the Examiner has rejected claims 1-10 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. In particular, it is presently understood based upon a complete review of the Examiner's Office Action that the word "isolated" as used in the phrases "a second extruder flow path that is isolated from the first extruder flow path" and "advancing the single ingredient in the isolated first and second extruder flow paths" is not supported and does not have clear and proper antecedent basis in the specification as originally filed and, therefore, constitutes new matter.

In accord with this understanding, the Applicants have amended claim 1 to delete all reference to the word “isolated” from the claim. Thus, it is believed that the rejection under 35 U.S.C. 112, first paragraph, has been rendered moot. In the event this is not the case, the Applicants respectfully request the Examiner discuss this matter with the undersigned attorney during any interview that may be had so that they may have a better understanding of the rejection and be given a further opportunity to amend the claims to obviate the rejection based upon that interview.

Turning to the prior art rejections, the Examiner has first maintained his rejection of the claims 1-10 under 35 U.S.C. 102(b) as being anticipated by Tsai et al. U.S. Patent No. 5,698,332. Apparently, the Examiner continues to maintain that this reference teaches a process of making a multi-structural filament from a single ingredient, however, this is simply not true. Thus, Applicants must again respectfully disagree with the position taken by the Examiner.

The Examiner’s interpretation of “single ingredient” in applying Tsai to the claims does not comport with the Applicants’ use of that term and its proper scope in the claims. Tsai begins with two different ingredients, having different morphologies *and two different melt points*. Each and every claim in Tsai is directed toward a composition or a process involving only poly(lactic acid). While other polymers are disclosed it is clear from Table 3 of Tsai that the use of any other ingredient besides poly(lactic acid) in both the core and the sheath of the exemplary fibers results in an unusable fiber within the confines of that document. (e.g., Table 3, Case 2, “core: Cargill 6902 (polylactic acid), Sheath: Bionolle #1020 (polybutylene succinate). Comments: Fibres can’t be attenuated because of poor melt strength”). Looking at the overall message of Tsai et al. Table 3, it is clear that only the use of PLA in both the first and second components results in a fiber meeting the utility requirements of 35 U.S.C. 101. In this regard, see especially claim 1 and Table 3, Cases 7 through 10.

Further, poly(lactic) acid is used in the Tsai reference only because it is optically active, and the differential properties afforded to the first and second components come only

via differences in the ratio of the L and D enantiomers in the respective components. Indeed, Tsai et al. emphasize the importance of using poly(lactic acid) in his invention: “in the multicomponent fiber of the present invention, it is **critical** that the poly(lactic acid) polymer in the first component comprise more of the D-enantiomer than the poly(lactic acid) polymer in the second component. As such, the poly(lactic acid) polymer in the first component will have an L:D ratio that is less than the L:D ratio exhibited by the poly(lactic acid) polymer in the second component.” (Col 5, lines 16-22) (emphasis supplied). Not only must PLA be used, but the relative ratio of L to D enantiomers in the two components is critical. This is clearly a **physical** change in the two starting components.

Thus, the multicomponent fiber of Tsai et al. is made from two different starting materials, which are two different PLA polymers. That is, it starts with two different PLA polymers, polymerized to two different levels of crystallinity, based on differential ratios of L to D enantiomers before processing. In contrast, the present invention has two starting materials that are identical in both chemical and physical properties. To make this point even more clear, Applicants have amended claim 1 in this respect to clearly delineate this distinction from Tsai et al.

In the present process, a “single ingredient” is employed, as defined at the paragraph beginning at page 7, line 10 of the specification. First, the starting materials are the same!! Second, some of the single ingredient is extruded through a first flow path to and through a die pack, subjecting that single ingredient to a first shear rate, while a second portion of the single ingredient is extruded through a second flow path to and through a die pack, subjecting that single ingredient to a second shear rate. In this way, a single homogeneous ingredient having a single morphology is transformed into a multi-structural filament having at least two distinct morphologies. Tsai thus does not disclose or even suggest a process in accordance with the claims of this application. Reconsideration is, therefore, respectfully requested.

Next, the Examiner has maintained his rejection of claims 1-10 as being unpatentable, as obvious, over Keuchel et al. US Patent No. 3,861,843 and, separately, over

Tsai et al. As Tsai et al. is discussed above, there is little more to be said regarding this reference. Again, however, Applicants believe the Tsai et al. does not suggest or render obvious a single ingredient (and particularly the starting material of the single ingredient) as defined in the specification of the subject application for any and all of the reasons previously provided. If, however, the Examiner disagrees, Applicants again respectfully request the Examiner to discuss this matter with the undersigned attorney during any interview that may be had so that they may have a better understanding of the rejection and be given a further opportunity to amend the claims to obviate the rejection based upon that interview.

With respect to Keuchel et al., the Examiner now contends that it would have been obvious to one of ordinary skill in the art at the time of the invention to use two extruders because Keuchel et al. teaches the use of conventional screw extruders or equivalent means. Again, Applicants respectfully but strenuously disagree.

In order to provide even more clarity to the differences between Keuchel and the present invention, Applicants have further amended claim 1 to indicate two separate extrusion process steps. The first extrusion process step extrudes a starting material of the single ingredient through a first extruder. The second extrusion process step separately extrudes a second starting material which, in reality, is the same starting material, both chemically and physically, as the first starting material, of the single ingredient through a second extruder. Clearly, Keuchel et al. does not show, teach, or suggest and is not motivated to provide the step of separately extruding a second starting material of the single ingredient. Support for the amendments in claim 1 can be found at pages 7 and 8 of the specification.

The Examiner assertion that one would be motivated to use two extruders as “equivalent means” in the process of Keuchel et al. is not well founded. Why would anyone be motivated to use two extruders at more time, effort and cost when the process of Keuchel et al. can be performed using only one conventional extruder as clearly shown in Keuchel et al.? Furthermore, Keuchel et al. clearly provides only one opening 3 through which

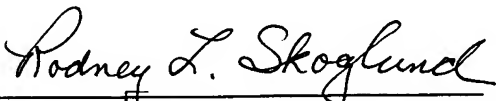
material may enter the die pack. The opening then separates into two separate chambers 5 and 7 *in the die pack*. Thus, the extrusion process in Keuchel only provides for one extrusion process or an equivalent means. An equivalent is not two extrusion processes. If so, then how would two extrusion processes be used in Keuchel et al. to enter through one opening 3? There is no structural equivalence that would allow anyone to operate Keuchel et al. in the manner proposed by the Examiner.

Again, should the Examiner disagree, the Applicants again respectfully request the Examiner to discuss this matter with the undersigned attorney during any interview that may be had so that they may have a better understanding of the rejection and be given a further opportunity to amend the claims to obviate the rejection based upon that interview.

In view of the foregoing amendments and arguments presented herein, Applicants respectfully request reconsideration of the application and withdrawal of the rejections. A Notice of Allowance of claims 1-10 is earnestly solicited. If any matter has been left unaddressed, Applicants' attorney would welcome a telephone call or other communication to that effect. . Should the Examiner care to discuss any of the foregoing in greater detail, the undersigned attorney would welcome a telephone call.

No new claims have been added and no fee is believed due with the filing of this document. However, in the event a fee is due, the undersigned attorney hereby authorizes the Commissioner to charge payment of any fees associated herewith or to credit any overpayment to deposit account no. 18-0987.

Respectfully Submitted,


Rodney L. Skoglund (Reg. No. 36,010)
Renner, Kenner, Grieve, Bobak, Taylor & Weber
Fourth Floor, First National Tower
Akron, Ohio 44308-1456
Telephone: (330) 376-1242
Attorney for Applicants

Ref. No: SHM.P.US0046DIV